DOCUMENT RESUME

ED 265 476 CG 018 800

AUTHOR Speth, Carol A.; Plake, Barbara S.
TITLE Assessment of Positive Sex-Role Characteristics.
PUB DATE Aug 85
NOTE 18p.; Paper presented at the Annual Convention of the American Psychological Association (93rd, Los Angeles, CA, August 23-27, 1985).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attribution Theory; College Students; *Employment Potential; Higher Education; *Sex Bias; *Sex Role; *Test Construction; *Test Reliability

ABSTRACT

While earlier, more blatant forms of sex discrimination may have declined, some researchers have suggested the existence of more subtle forms of bias, based less on gender than on gender-related attributes. The investigation of bias related to either gender or gender-related attributes requires a scale to address both the gender-relatedness of characteristics and how positively or negatively the stereotypical characteristics are viewed. Twenty masculine, 20 feminine, and 20 neutral gender-related characteristics with positive connotations related to employability were selected for the development of the Positive Sex Role Inventory (PSRI). The 60 attributes were placed in an instrument and presented to 284 undergraduates who rated the attributes for their desirablity for a counseling psychologist. Analysis of this instrument showed that the scale had a three-factor structure and satisfactory subscale internal consistency reliability. Five masculine and feminine item pairs were then identified from the subscales so that the mean difference between the rating of the two items was not statistically significant. This study yielded two experimentally useful products: the PSRI can be used in experimental research involving positive sex-role attributes and the set of five item pairs developed to be of equal market value provides a potentially useful methodology for sex bias research. (NRB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED265476

Assessment of Positive Sex-Role Characteristics

Carol A. Speth

Barbara S. Plake

Universitiy of Nebraska-Lincoln

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Carol A Speth

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CG 018800

Running Head: PSRI

Paper presented at the annual meeting of the American Psychological Association, Los Angeles, 1985.

Assessment of Positive Sex-Role Characteristics

Introduction

The increasing numbers of women in professional and managerial roles provide evidence of more equitable hiring procedures. While earlier, more blatant forms of sex discrimination may have declined (Chabot, Goldberg, Abramson, and Abramson, 1979), researchers have found evidence of bias concerning professions associated primarily with one gender (Mischel, 1974; Bernard, 1979). Berman, Dersheid, Gerber, Major, Plake, Speth, and Tomes (1984) suggested the existence or persistence of new, more subtle forms of bias, based less on gender than on gender-related attributes.

It has been found that often stereotypically masculine attributes are considered more essential for work success (Bernard, 1979; Rapin and Cooper, 1980). As an explanation for some of their findings, Powers-Alexander, Galvin, Lambert, Speth & Plake (1983) voiced the suspicion that even the most positive feminine attributes may not be as highly valued as masculine attributes in most employment situations.

Investigations of complex and subtle forms of sex bias in employment situations have been hampered in part by the lack of a scale or inventory which would address not only the gender relatedness of attributes, but also the issue of how important these characteristics are for employment, in other words, their

"market value." Earlier attempts to measure sex-role attributes included the Bem Sex Role Inventory (BSRI, 1974), with 20 "masculine," 20 "feminine," and 20 "neutral" attributes.

However, one troublesome aspect of the BSRI is that it appears Bem did not accomplish her goal (Bem, 1978) of treating both masculinity and femininity as positive domains of behavior. A glance at the 60 items of the BSRI indicates that, whereas only one of the masculine items might be considered less than positive, depending on the context in which it is used (aggressive), four of the feminine items would probably be considered less than positive in most professional settings (childlike, flatterable, shy and yielding).

Williams and Bennett (1975) and Williams and Best (1977) used the Adjective Check List (Gough and Heilbrun, 1965) to "empirically define male and female stereotypes." They provided one group of subjects with a list of characteristics developed to describe people in general, and asked them to select which are more typical of men and which are more typical of women. Through this process they developed lists of 42 male-focused and 48 female-focused attributes. In addition, another group of subjects was asked to rate each of the 300 adjectives on a five-point scale in terms of its "favorability." Although the analyses by Williams and Bennett (1975) and Williams and Best (1977) were directed at identifying masculine and feminine sex-role characteristics and

to reveal the "favorability" of each, they did not generate a single scale to use for assessment purposes. Finally, Heilbrun (1976) discussed a revision of a sex-role scale taken from the Adjective Check List "in order to extend its potential to the independent measurement of masculinity and femininity."

This present study had two purposes. First the study was designed to develop a scale similar to the BSRI but only containing sex-role characteristics which would usually be considered positive for employment settings. Second, the item ratings on this instrument were analyzed with the intent of developing a methodology which would yield a subset of item pairs, one masculine and one feminine item in each pair, that would have equivalent "market value" for a specific profession. Counseling psychology was selected as the target profession because it is considered gender-neutral (Shinar, 1975).

Procedures

Twenty masculine, feminine, and neutral attributes were carefully chosen from lists developed by Bem (1974), Williams and Bennett (1975), Williams and Best (1977), Spence, Helmreich and Stapp (1975), Heilbrun (1976), and Broverman et al., (1972), selecting only gender-related characteristics with positive connotations related to employability. These 60 items were used to comprise the Positive Sex Role Inventory (PSRI).

In the first phase of the study, the 60 attributes were randomly placed into an instrument and presented to 284 (128 males, 156 females) undergraduate students at a large midwestern university. The students rated these attributes for their desirability for a counseling psychologist using a 1-5 point scale (1=fairly desirable, 5=extremely desirable). This set of ratings was analyzed to investigate the psychometric properties of the 60-item scale, particularly the internal reliability of the subscales and the instrument's factor structure.

In the second phase of the study, the item ratings were examined to identify a subset of five item pairs, one masculine and one feminine item to each pair, such that the difference in mean desirability between the masculine and feminine items was nonsignificant. This procedure also yielded a set of positive masculine and feminine characteristics that were collectively not statistically different in desirability for a counseling psychologist.

Results

The 60 items which comprise the Positive Sex Role Inventory are shown in Table 1. Means, standard deviations, and coefficient alpha reliability values for the Masculine, Feminine and Neutral subscales are displayed in Table 2. The ratings for the 60 items were intercorrelated and the resultant matrix of correlations was submitted to a principal axes iterative factor analysis. A Scree

test was performed on the eigenvalues to determine the number of salient factors to retain for rotation. Through this procedure, three factors were identified, representing 35% of the total variance. These factors were then submitted to an orthogonal varimax rotation to facilitate factor interpretation. The factor pattern is shown in Table 3, while Table 4 presents the items sorted by magnitude of loadings for each factor.

The individual ratings for the masculine and feminine items were then examined to identify five item pairs, one masculine and one feminine item in each pair, such that the difference in mean rating between the two items was not significant (α=.05). The five masculine items thus identified were confident, rational, logical, realistic, and has leadership abilities, which paired with the five feminine items: patient, warm, kind, cooperative, and sensitive, respectively.

Discussion

This study consisted of two parts. In part one, a 60-item rating scale was developed consisting of three 20-item subscales: Masculine, Feminine and Neutral. These items were selected to be positive in valence yet stereotypical in sex-role identification. Analysis of this instrument demonstrated that the scale had a three-factor structure and satisfactory subscale internal consistency reliability. In the second phase of the study, five masculine and feminine item pairs were identified from the

subscales so that the mean difference between the rating of the two items was not statistically significant.

This project yielded two experimentally useful products. First, the Positive Sex Role Inventory presents a psychometrically sound instrument that can be used in experimental research involving positive sex-role attributes. Second, the set of five item pairs developed to be of equal "market value" is a potentially useful methodology for sex bias research. In such endeavors, it is often desirable to develop bogus materials varying in masculine and feminine attributes (see Berman, et al, 1984). Using previous instruments, the masculine and feminine subscales were usually not comparable in terms of their desirability or favorability (the term used by Williams, Bennett and Best), "market value" or employability. Thus, characteristics that were chosen because they differed in sex-role orientation, also differed in their value in employment situations. By bringing the three subscales more into balance with each other and subjecting individual items to a secondary analysis to identify pairs of equally-valued attributes, one methodological flaw of previous research on sex bias may be avoided.

References

Bem, S. L. (1978). Beyond androgyny. In J.A. Sherman and F.L. Denmark (Eds.), The Psychology of Women: Future Directions in Research. New York: New York: Psychological Inc.

Bem, S. L. (1974). The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 155-162.

Berman, V. M., Derscheid, L. E., Gerber, R. W., Major, H., Plake, B. S., Speth, C. A., & Tomes, R. (1985). A study of access decisions by personnel directors: subtle forms of sex bias in hiring. Paper presented at the Iowa Educational Research Association Meeting in Cedar Rapids.

Bernard, M. E. (1979). Does sex role behavior influence the way teachers evaluate students? Journal of Educational Psychology, 71, 553-562.

Broverman, I. K., Vogel, S. R., Broverman, D. M., Clarkson, F. E., & Rosenkrantz, P. (1972). Sex-Role stereotypes: A current appraisal. Journal of Social Issues, 2, 59-77.

Chobot, D. S., Goldberg, P. A., Abramson, L., & Abramson, P. Prejudice against women: A replication and extension. Psychological Reports, 34, 478.

Heilbrun, A. B. (1976). Measurement of masculine and feminine sex role identities as independent dimensions. Journal of Consulting and Clinical Psychology, 44, 183-190.

Krefting, L. A., Berger, P. K. (1979). Masculinity-Femininity perceptions of job requirements and their relationship to job-sex stereotypes. Journal of Vocational Behavior, 15, 164-174.

Mischel, H. N. (1974). Sex bias in the evaluation of professional achievements. Journal of Educational Psychology, 66, 157-166.

Nielsen, J. M., Doyle, P. T. (1975). Sex role stereotypes of feminists and non-feminists. Sex Roles, 1, 83,95.

Powers-Alexander, S., Galvin, G. A., Lambert, D. J., Speth, C. A., & Plake, B. S. (1983). Attribution of Success in College Women: Effort or Luck? Paper presented at the American Educational Research Association Meeting in Montreal, Canada.

Rapin, L. S., & Cooper, M. (1980). Images of men and women: A comparison of feminists and nonfeminists. Psychology of Women Quarterly, 5, 186-194.

Shinar, E. H. (1975). Sexual stereotypes of occupations. Journal of Vocational Behavior, 799-111.

Silvern, L. E. & Ryan, V. L. (1979). Self-rated adjustment and sex-typing on the Bem Sex Role Inventory: Is masculinity the primary predictor of adjustment? Sex Roles, 5, 739-763.

Spence, J. T., Helmreich, R. & Stapp, J. (1975). Ratings of self and peers on sex-role attributes and their relation to self-esteem and conceptions of masculinity and femininity. Journal of Personality and Social Psychology, 32, 29-39.

Williams, J. E. & Bennett, S. M. (1975). The definition of sex stereotypes via the Adjective Check List. Sex Roles, 1, 327-337.

Williams, J. E. & Best, D. L. (1977). Sex stereotypes and trait favorability on the Adjective Check List. Educational and Psychological Measurement, 37, 101-110.

Table 1

Sex-Role Attributes by Subscale

Masculine	Femininine	Neutral
stable	patient	trustworthy
confident	understanding	reliable
rational	warm	truthful
logical	loyal	responsible
realistic	kind	intelligent
has leadership abilitities	cooperative	mature
makes decisions easily	pleasant	helpful
assertive	sensitive	friendly
active	cheerful	sincere
ambitious	compassionate	adaptable
industrious	imaginative	likeable
strong	sympathetic	tactful
enterprising	gentle	efficient
independent	sociable	self-accepting
courageous	forgiving	ethical
adventurous	cautious	tolerant
competitive	charming	flexible
forceful	emotional	articulate
dominant	feminine	conscientious
masculine	considerate	serious

Table 2

Means, Standard Deviations, and Coefficient Alpha Reliability of the Masculine, Feminine, and Neutral

Subscale	Mean	SD	Coefficient Alpha
Masculine	41.06	10.3	.82
Feminine	47.86	11.2	.84
Neutral	59.29	9.4	.76

Table 3

Varimax Rotated Factor Pattern

Item	Subscale	Factor 1	Factor 2	Factor 3
1. tolerant	N	.37	.04	.01
2. logical	M	.18	.20	.04
3. active	M	-.11	.35	.32
4. imaginative	F	.09	.23	.25
5. loyal	F	.08	.38	.16
6. competitive	M	-.27	.19	.52
7. confident	M	.11	.39	.12
8. stable	M	.45	.16	-.04
9. considerate	F	.06	.31	.22
10. industrious	M	.61	.20	.03
11. ambitious	M	-.16	.43	.44
12. rational	M	.36	.26	.04
13. warm	F	.73	.08	-.11
14. tactful	N	.61	.08	-.03
15. ethical	N	.52	.10	-.05
16. strong	M	.22	.24	.36
17. responsible	N	.12	.56	.08
18. assertive	M	.03	.33	.42
19. realistic	M	.36	.26	.13
20. kind	F	.72	.22	.04

21. independent	M	.29	.25	.52
22. cautious	F	.26	.06	.35
23. cooperative	F	.29	.48	.18
24. forceful	M	-.05	.04	.59
25. sympathetic	F	.70	-.03	.04
26. truthful	N	.30	.35	.15
27. masculine	M	-.08	-.13	.61
28. compassionate	F	.73	-.02	.07
29. dominant	M	-.11	-.00	.65
30. sincere	N	.63	.18	.05
31. gentle	F	.73	.06	.16
32. intelligent	N	.16	.21	.01
33. adaptable	N	.20	.34	.06
34. cheerful	F	.40	.44	.10
35. serious	N	.16	.26	.39
36. conscientious	F	.35	.35	.14
37. patient	F	.50	.22	-.08
38. likeable	N	.45	.43	-.00
39. feminine	F	.10	-.01	.54
40. has leadership abilities	M	-.10	.37	.33
41. forgiving	F	.58	.23	.29
42. helpful	N	.46	.39	.10
43. adventurous	M	-.00	.22	.60

44. friendly	N	.55	.49	.13
45. courageous	M	.11	.27	.58
46. trustworthy	N	.28	.47	.01
47. pleasant	F	.52	.42	.13
48. charming	F	.27	.23	.35
49. reliable	N	.19	.58	.12
50. enterprising	M	-.08	.37	.45
51. flexible	N	.34	.36	.45
52. understanding	F	.61	.31	-.08
53. mature	N	.35	.44	.02
54. sensitive	F	.73	.16	.05
55. articulate	N	.26	.36	.10
56. efficient	N	-.01	.59	.30
57. self-accepting	N	.28	.36	.16
58. emotional	F	.28	-.01	.44
59. sociable	F	.28	.24	.33
60. makes decisions easily	M	.16	.32	.21

Table 4

Maximum Loading for the 60 Items in Rank Order From Most to Least

Factor 1		Factor 2		Factor 3	
compassionate (F)	.73	reliable (N)	.58	dominant (M)	.65
sensitive (F)	.73	responsible (N)	.56	masculine (M)	.61
warm (F)	.73	cooperative (F)	.47	forceful (M)	.59
kind (F)	.72	trustworthy (N)	.46	adventurous (M)	.58
sincere (F)	.63	cheerful (F)	.44	courageous (M)	.58
gentle (F)	.63	mature (M)	.44	feminine (F)	.54
considerate (F)	.61	confident (M)	.39	independent (M)	.52
tactful (F)	.61	loyal (F)	.38	competitive (M)	.52
understanding (F)	.61	flexible (N)	.36	enterprising (M)	.45
forgiving (F)	.58	self-accepting (N)	.36	emotional (F)	.44
friendly (N)	.55	articulate (N)	.36	ambitious (M)	.44
pleasant (F)	.52	active (M)	.35	assertive (M)	.42
ethical (N)	.52	adaptable (N)	.34	serious (N)	.39
patient (F)	.50	truthful (N)	.34	strong (M)	.36
helpful (N)	.46	industrious (M)	.31	cautious (F)	.35
stable (M)	.45	efficient (N)	.30	charming (F)	.35
likeable (N)	.45	makes decisions easily (M)	.22	sociable (F)	.33
tolerant (N)	.37	intelligent (N)	.21	has leadership abilities (M)	.32
realistic (M)	.36	logical (M)	.20	imaginative (F)	.25

conscientious (N) .36

rational (M) .36